What is claimed is:

1. A method of producing a growth medium test sheet, comprising:
printing a plurality of growth spots on a surface of a substrate by depositing drops of growth medium on the substrate.

2. The method of claim 1, wherein different growth spots comprise different compositions.

3. The method of claim 2, wherein the plurality of growth spots comprise individual spots composed of all or a portion of the possible combinations of
(a) a first group of one or more growth media; and
(b) a second group of one or more nutrients.

4. The method of claim 1, wherein printing comprises depositing a nutrient in at least one of the plurality of growth spots.

5. The method of claim 1, further comprising printing at least one label identifying a growth spot on the substrate.

6. The method of claim 1, wherein printing comprises printing with an ink-jet printer.

7. The method of claim 1, wherein the substrate surface comprises a material selected from the group consisting of glass, plastic, and paper.

8. A growth medium printing system for printing growth spots on a substrate, comprising:
at least one print head, wherein each print head is connected to a reservoir containing a liquid culture medium or a liquid nutrient, and wherein each print head is arranged and constructed to

deposit droplets of the liquid culture medium or the liquid nutrient onto selected regions of the substrate to form growth spots.

9. The growth medium printing system of claim 8, wherein the system comprises a plurality of print heads, wherein each print head's connected reservoir contains a different composition of liquid culture medium or liquid nutrient.

10. The growth medium printing system of claim 8, further comprising a sterilizer that sterilizes the printed growth spots.

11. The growth medium printing system of claim 10, wherein the sterilizer is a heater.

12. The growth medium printing system of claim 10, wherein the sterilizer is an ultraviolet light.

13. The growth medium printing system of claim 8, further comprising substrate-handling means for moving the substrate relative to the print heads.

14. The growth medium printing system of claim 8, further comprising a print head connected to an ink reservoir and arranged and constructed to print a label on the substrate.

15. The growth medium printing system of claim 8, further comprising a print head connected to a cell reservoir and arranged and constructed to inoculate cells onto the substrate.

16. The growth medium printing system of claim 8, further comprising a print head connected to a decorating reagent reservoir and arranged and constructed to print reagent onto growth spots on the substrate.

17. A method of performing a cell culture, comprising:
printing a plurality of growth spots onto a substrate by depositing drops of growth medium on the substrate;
inoculating the printed growth spots by placing cells on the substrate;
culturing the cells on the substrate; and
inspecting the growth spots for evidence of cell growth.

18. The method of claim 17, wherein different printed growth spots have different compositions.

19. The method of claim 18, wherein the plurality of growth spots comprise individual spots composed of all or a portion of the possible combinations of
(a) a first group of one or more growth media; and
(b) a second group of one or more nutrients.

20. The method of claim 17, wherein printing comprises printing with an ink-jet printer.

21. The method of claim 17, wherein the printed growth spots comprise agar or gelatin.

22. The method of claim 17, wherein the printed growth spots comprise a nutrient.

23. The method of claim 22, wherein the nutrient is selected from the group consisting of carbohydrates and other carbon sources, minerals and mineral salts, proteins and amino acids, lipids and fatty acids, and vitamins.

24. The method of claim 17, wherein inoculating comprises printing a composition containing the cells with an ink-jet printer.

25. The method of claim 17, further comprising sterilizing the substrate prior to inoculating the printed growth spots.

26. The method of claim 25, wherein sterilizing comprises exposing the substrate to a heater.

27. The method of claim 25, wherein sterilizing comprises exposing the substrate to an ultraviolet light source.

28. The method of claim 17, wherein inspecting the growth spots comprises measuring turbidity of the growth spots using a turbidometer.

29. The method of claim 17, wherein inspecting the growth spots comprises electronically scanning the substrate to determine their color.

30. The method of claim 17, wherein inspecting the growth spots comprises recording multiple images .

31. The method of claim 17, wherein the substrate surface comprises a material selected from the group consisting of glass, plastic, and paper.

32. The method of claim 17, further comprising printing at least one label on the substrate.

33. A growth medium test sheet, comprising:
a substrate comprising a plurality of growth spots printed thereon,
wherein each growth spot comprises a culture medium, and
wherein different growth spots have different compositions.

34. The growth medium test sheet of claim 33, wherein the plurality of growth spots comprise individual spots composed of all or a portion of the possible combinations of

(a) a first group of one or more growth media; and

(b) a second group of one or more nutrients.

35. The growth medium test sheet of claim 33, wherein the growth spots are printed on a surface of the substrate comprising a material selected from the group consisting of glass, plastic, and paper.

36. The growth medium test sheet of claim 33, wherein at least a portion of the growth spots comprise a nutrient.

37. The growth medium test sheet of claim 36, wherein different growth spots comprise different nutrients.

38. The growth medium test sheet of claim 36, wherein the growth spots are uniform in size and shape.

39. The growth medium test sheet of claim 36, wherein the test sheet further comprises at least one label identifying the composition of at least one of the growth spots.

40. A growth medium test sheet, comprising:

a substrate comprising a plurality of growth spots printed thereon,

wherein each growth spot comprises a culture medium, and

wherein each growth spot has substantially the same composition.

41. The growth medium test sheet of claim 40, wherein the growth spots are printed on a surface of the substrate comprising a material selected from the group consisting of glass, plastic, and paper.

42. The growth medium test sheet of claim 40, wherein each growth spot additionally comprises at least one nutrient.

43. The growth medium test sheet of claim 40, wherein the growth spots are uniform in size and shape.

44. The growth medium test sheet of claim 40, wherein the test sheet further comprises at least one label identifying the composition of the growth spots.

45. An automated cell analysis workstation, comprising:

a printer comprising at least one print head, wherein each print head is connected to a reservoir containing a liquid culture medium, a liquid nutrient, or a culturable organism, and wherein each print head is arranged and constructed to deposit droplets of the liquid culture medium, liquid nutrient, or culturable organism onto selected regions of a substrate to form growth spots;

a culturing chamber comprising means for maintaining a selected temperature in a sterile environment;

an imaging device capable of detecting growth in culture of the culturable organism;

one or more microprocessors suitably programmed to control the printer and culturing chamber and to record images obtained by the imaging device or data derived from images obtained by the imaging device; and

an input/output system allowing a user to select printing parameters and culturing conditions and to view or save the images or data derived from images.